---14. (New)   A method of processing a single channel audio signal corresponding to a sound from a sound source located at a source position relative to a preferred position of a listener, comprising:

providing a right channel and a left channel, each of said right channel and said left channel carrying said single channel audio signal;

modifying said single channel audio signal of each of said right channel and said left channel using at least one of a plurality of head response transfer functions to provide a right signal in said right channel for a right ear of said listener and a left signal in said left channel for a left ear of said listener;

introducing a time delay between said right channel and said left channel to provide cues to perception of a direction of said source position relative to said preferred position of said listener at a given time, said time delay corresponding to an inter-aural time difference of said sound from said sound source with respect to said listener; and

choosing respective values for magnitude of said left signal and magnitude of said right signal to provide cues for perception of a distance of said source position from said preferred position at said given time.

15. (New)   The method of processing a single channel audio signal in accordance with claim 14, wherein:

said respective values for magnitude of said left signal and said magnitude of said right signal are chosen separately.

16. (New)   The method of processing a single channel audio signal in accordance with claim 14, wherein:

said respective values for magnitude of said left signal and said magnitude of said right signal are determined based on an inverse of square of a distance between said source position and respective ears of said listener.

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17. (New)   The method of processing a single channel audio signal in accordance with claim 14, wherein:

said step of choosing respective values for magnitude of said left signal and magnitude of said right signal comprises:

providing a look-up table having thereon distances between said source position and respective ears of said listener, said distances corresponding to associative ones of said values for magnitude of said left signal and said magnitude of said right signal; and

selecting said values for magnitude from said look-up table.

18. (New)   The method of processing a single channel audio signal in accordance with claim 16, wherein:

said step of choosing respective values for magnitude of said left signal and magnitude of said right signal comprises:

selecting a distance from said source position to a center of a head of said listener at said given time; and

determining said distance between said source position and respective ears of said listener based on said inter-aural time delay.

19. (New)   The method of processing a single channel audio signal in accordance with claim 18, wherein:

said step of choosing respective values for magnitude of said left signal and magnitude of said right signal further comprises:

providing a look-up table having thereon distances between said source position and respective ears of said listener, said distances corresponding to associative ones of said values for magnitude of said left signal and said magnitude of said right signal; and

selecting said values for magnitude from said look-up table.

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20. (New)   The method of processing a single channel audio signal in accordance with claim 14, wherein:

at least one of said magnitude of said left signal and said magnitude of said right signal is sufficiently small as to be inaudible.

21. (New)   The method of processing a single channel audio signal in accordance with claim 14, wherein:

said left signal and said right signal are compensated to provide at least one of a cancellation and a reduction of transaural crosstalk when said left signal and said right signal are supplied through said left channel and said right channel respectively for replay by loudspeakers.

22. (New)   The method of processing a single channel audio signal in accordance with claim 14, further comprising:

combining said left signal and said right signal with other two or more channel audio signals.

23. (New)   The method of processing a single channel audio signal in accordance with claim 22, wherein:

said step of combining comprises:

adding respective contents of said left channel and said right channel to corresponding channels of said other two or more channel signals.

24. (New)   A computer readable storage medium having stored thereon a computer program for implementing a method of processing a single channel audio signal corresponding to a sound from a sound source located at a source position relative to a preferred position of a listener, said computer program comprising a set of instructions for:

providing a right channel and a left channel, each of said right channel and said left channel carrying said single channel audio signal;

modifying said single channel audio signal of each of said right channel and said left channel using at least one of a plurality of head response transfer functions to provide a right signal in said right channel for a right ear of said listener and a left signal in said left channel for a left ear of said listener;

introducing a time delay between said right channel and said left channel to provide cues to perception of a direction of said source position relative to said preferred position of said listener at a given time, said time delay corresponding to an inter-aural time difference of said sound from said sound source with respect to said listener; and

choosing respective values for magnitude of said left signal and magnitude of said right signal to provide cues for perception of a distance of said source position from said preferred position at said given time.

25. (New)   The computer readable storage medium according to claim 24, wherein:

said respective values for magnitude of said left signal and said magnitude of said right signal are chosen separately.

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26. (New)   The computer readable storage medium according to claim 24, wherein:

said respective values for magnitude of said left signal and said magnitude of said right signal are determined based on an inverse of square of a distance between said source position and respective ears of said listener.

27. (New)   The computer readable storage medium according to claim 24, wherein:

said set of instructions for choosing respective values for magnitude of said left signal and magnitude of said right signal comprises a set of instructions for:

providing a look-up table having thereon distances between said source position and respective ears of said listener, said distances corresponding to associative ones of said values for magnitude of said left signal and said magnitude of said right signal; and

selecting said values for magnitude from said look-up table.

28. (New)   The computer readable storage medium according to claim 26, wherein:

said set of instructions for choosing respective values for magnitude of said left signal and magnitude of said right signal comprises a set of instructions for:

selecting a distance from said source position to a center of a head of said listener at said given time; and

determining said distance between said source position and respective ears of said listener based on said inter-aural time delay.

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29. (New)   The computer readable storage medium according to claim 28, wherein:

said set of instructions for choosing respective values for magnitude of said left signal and magnitude of said right signal further comprises a set of instructions for:

providing a look-up table having thereon distances between said source position and respective ears of said listener, said distances corresponding to associative ones of said values for magnitude of said left signal and said magnitude of said right signal; and

selecting said values for magnitude from said look-up table.

30. (New)   The computer readable storage medium according to claim 24, wherein:

at least one of said magnitude of said left signal and said magnitude of said right signal is sufficiently small as to be inaudible.

31. (New)   The computer readable storage medium according to claim 24, wherein:

said left signal and said right signal are compensated to provide at least one of a cancellation and a reduction of transaural crosstalk when said left signal and said right signal are supplied through said left channel and said right channel respectively for replay by loudspeakers.

32. (New)   The computer readable storage medium according to claim 24, wherein:

said computer program further comprises a set of instructions for:

combining said left signal and said right signal with other two or more channel audio signals.

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33. (New)   The computer readable storage medium according to claim 32, wherein:

said set of instructions for combining said left signal and said right signal with other two or more channel audio signals comprises a set of instructions for:

adding respective contents of said left channel and said right channel to corresponding channels of said other two or more channel signals.

34. (New)   An apparatus for processing a single channel audio signal corresponding to a sound from a sound source located at a source position relative to a preferred position of a listener, comprising:

means for providing a right channel and a left channel, each of said right channel and said left channel adapted to carry said single channel audio signal;

means for modifying said single channel audio signal of each of said right channel and said left channel using at least one of a plurality of head response transfer functions to provide a right signal in said right channel for a right ear of said listener and a left signal in said left channel for a left ear of said listener;

means for introducing a time delay between said right channel and said left channel to provide cues to perception of a direction of said source position relative to said preferred position of said listener at a given time, said time delay corresponding to an inter-aural time difference of said sound from said sound source with respect to said listener; and

means for choosing respective values for magnitude of said left signal and magnitude of said right signal to provide cues for perception of a distance of said source position from said preferred position at said given time.

35. (New)   The apparatus for processing a single channel audio signal according to claim 34, wherein:

said means for choosing said respective values is adapted to choose said respective values for magnitude of said left signal and said magnitude of said right signal separately.

36. (New)   The apparatus for processing a single channel audio signal according to claim 34, wherein:

said means for choosing said respective values is adapted to choose said respective values for magnitude of said left signal and said magnitude of said right signal based on an inverse of square of a distance between said source position and respective ears of said listener.

37. (New)   The apparatus for processing a single channel audio signal according to claim 34, wherein:

said means for choosing respective values for magnitude of said left signal and magnitude of said right signal comprises:

a look-up table having thereon distances between said source position and respective ears of said listener, said distances corresponding to associative ones of said values for magnitude of said left signal and said magnitude of said right signal; and

means for selecting said values for magnitude from said look-up table.

38. (New)   The apparatus for processing a single channel audio signal according to claim 36, wherein:

said means for choosing respective values for magnitude of said left signal and magnitude of said right signal comprises:

means for selecting a distance from said source position to a center of a head of said listener at said given time; and

means for determining said distance between said source position and respective ears of said listener based on said inter-aural time delay.

39. (New)   The apparatus for processing a single channel audio signal according to claim 37, wherein:

said means for choosing respective values for magnitude of said left signal and magnitude of said right signal further comprises:

a look-up table having thereon distances between said source position and respective ears of said listener, said distances corresponding to associative ones of said values for magnitude of said left signal and said magnitude of said right signal; and

means for selecting said values for magnitude from said look-up table.

40. (New)   The apparatus for processing a single channel audio signal according to claim 34, wherein:

at least one of said magnitude of said left signal and said magnitude of said right signal is sufficiently small as to be inaudible.

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41. (New)   The apparatus for processing a single channel audio signal according to claim 34, further comprising:

compensating means for providing at least one of a cancellation and a reduction of transaural crosstalk in said left signal and said right signal when said left signal and said right signal are supplied through said left channel and said right channel respectively for replay by loudspeakers.

42. (New)   The apparatus for processing a single channel audio signal according to claim 34, further comprising:

means for combining said left signal and said right signal with other two or more channel audio signals.

43. (New)   The apparatus for processing a single channel audio signal according to claim 42, wherein:

said means for combining comprises:

means for adding respective contents of said left channel and said right channel to corresponding channels of said other two or more channel signals.

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44. (New)   An audio signal, comprising:

a right signal for a right ear of a listener, said right signal being obtained by modifying a single channel audio signal using at least one of a plurality of head response transfer functions, said single channel audio signal corresponding to a sound from a sound source located at a source position relative to a preferred position of said listener; and

a left signal for a left ear of said listener, said left signal being obtained by modifying said single channel audio signal using at least one of a plurality of head response transfer functions,

wherein said left signal and said right signal having therebetween a time delay to provide cues to perception of a direction of said source position relative to said preferred position of said listener at a given time, said time delay corresponding to an inter-aural time difference of said sound from said sound source with respect to said listener; and

wherein respective values for magnitude of said left signal and magnitude of said right signal is chosen to provide cues for perception of a distance of said source position from said preferred position at said given time.

45. (New)   The audio signal according to claim 44, wherein:

said respective values for magnitude of said left signal and said magnitude of said right signal are chosen separately.
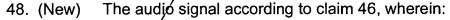
46. (New)   The audio signal according to claim 44, wherein:

said respective values for magnitude of said left signal and said magnitude of said right signal are determined based on an inverse of square of a distance between said source position and respective ears of said listener.

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47. (New)   The audio signal according to claim 44, wherein:

said respective values for magnitude of said left signal and magnitude of said right signal are chosen by selecting said values for magnitude from a look-up table having thereon distances between said source position and respective ears of said listener, said distances corresponding to associative ones of said values for magnitude of said left signal and said magnitude of said right signal.

48. (New)   The audio signal according to claim 46, wherein:

said respective values for magnitude of said left signal and magnitude of said right signal are chosen by selecting a distance from said source position to a center of a head of said listener at said given time, and by determining said distance between said source position and respective ears of said listener based on said inter-aural time delay.

49. (New)   The audio signal according to claim 48, wherein:

said respective values for magnitude of said left signal and magnitude of said right signal are chosen by selecting said values for magnitude from said look-up table having thereon distances between said source position and respective ears of said listener, said distances corresponding to associative ones of said values for magnitude of said left signal and said magnitude of said right signal.

50. (New)   The audio signal according to claim 44, wherein:

at least one of said magnitude of said left signal and said magnitude of said right signal is sufficiently small as to be inaudible.

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51. (New)   The audio signal according to claim 44, wherein:

said left signal and said right signal are compensated to provide at least one of a cancellation and a reduction of transaural crosstalk when said left signal and said right signal are supplied through said left channel and said right channel respectively for replay by loudspeakers.

52. (New)   The audio signal according to claim 44, wherein:

said left signal and said right signal are combined with other two or more channel audio signals.

53. (New)   The audio signal according to claim 52, wherein:

said left signal and said right signal are combined by adding respective contents of said left channel and said right channel to corresponding channels of said other two or more channel signals.----